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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,209	05/25/2006	Vincenzo Calemma	283893US0XPCT	8192
22850	7590	06/25/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
HAILEY, PATRICIA L				
ART UNIT		PAPER NUMBER		
1793				
NOTIFICATION DATE		DELIVERY MODE		
06/25/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdoCKET@oblon.com

oblonpat@oblon.com

jgardner@oblon.com

# Office Action Summary

**Application No.**

10/563,209

**Applicant(s)**

CALEMMA ET AL.

**Examiner**

PATRICIA L. HAILEY

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 April 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-5 and 11-14 is/are rejected.  
7) ☒ Claim(s) 6-10 and 15-27 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 04/03/06  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

Applicants' Preliminary Amendment, filed on January 3, 2006, has been made of record and entered. Claims 1, 3-6, 8-11, and 15-27 have been amended to eliminate multiple claim dependency and for clarity; no new matter has been added in these amendments. No claims have been canceled or added.

Claims 1-27 remain pending in this application.

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Applicants' Priority Document was filed on January 3, 2006.

### ***Claim Objections***

2. ***Claim 11 is objected to because of the following informalities:***

In claim 12, the word "isomerization" appears to be the word "isomerization" misspelled. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. ***Claims 11-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.***

Claims 11-14 recite phrases such as "Use of the amorphous porous solid..." or "Use according to claim...", which renders these claims non-statutory.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**6. *Claims 1-5, and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Chao et al. (U. S. Patent No. 5,230,789).***

Chao et al. disclose a catalytic composite which is an amorphous solid solution of phosphorus, silicon, and aluminum oxides (Abstract). The composite is characterized in that it contains from about 5 to about 50 weight percent  $\text{Al}_2\text{O}_3$ , from about 10 to about 90 percent  $\text{SiO}_2$ , and from about 5 to about 40 weight percent  $\text{P}_2\text{O}_5$  (which gives a composite with atomic ratios of  $\text{Si}/\text{Al} = 15$  and  $\text{P}/\text{Al} = 0.7$ ), has pores whose average diameter ranges from about 30 to about 300 Å (3 to 30 nm), has a pore volume of about 0.35 to about 0.75 cc/g (ml/g), and has a surface area ranging from about 200 to about 420  $\text{m}^2/\text{g}$ . See col. 4, lines 45-49 of Chao et al. (considered to read upon **claims 1-4**).

The amorphous composite may be employed to catalyze various hydrocarbon conversion processes, and may act as a support for dispersing catalytic metals. Exemplary catalytic metals include iron, cobalt, nickel, platinum; the concentration of

metals varies considerably from about 0.1 to about 20 weight percent of the support for each metal. See col. 4, lines 50-65 of Chao et al. (considered to read upon **claim 5**).

Exemplary conversion processes include isomerization, oligomerization, hydrogenation, dehydrogenation, hydrocracking, etc. See col. 5, line 41 to col. 6, line 60 of Chao et al (considered to read upon **claims 11-14**). Although Chao et al. do not explicitly disclose "dewaxing of hydrocarbons", Chao et al. disclose that hydrocarbon conversion processes are "well known in the art"; therefore, the employment of Patentees' amorphous composite in a hydrocarbon dewaxing process would have been anticipated by the skilled artisan.

In view of these teachings, Chao et al. anticipate claims 1-5 and 11-14.

#### ***Allowable Subject Matter***

7. Claims 6-10 and 15-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not teach or suggest the limitations of these claims. Chao et al. do not teach or suggest combining the amorphous composite with an inert organic binder. Further, the method for preparing the amorphous composite disclosed in Chao et al. at col. 2, line 54 to col. 4, line 30 differs from the method recited in claims

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15-27 in that Chao et al. do not teach or suggest the employment of a tetra-alkylammonium hydroxide, or of a silicate of at least one hydrocarbon residue.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PATRICIA L. HAILEY whose telephone number is (571)272-1369. The examiner can normally be reached on Mondays-Fridays, from 7:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorenzo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PATRICIA L. HAILEY/  
Examiner, Art Unit 1793  
June 19, 2008